

# VORTEX



Sewage water
 Domestic use
 Civil use

#### **PERFORMANCE RANGE**

- Flow rate up to **400 l/min** (24 m<sup>3</sup>/h)
- Head up to 13 m

#### **APPLICATION LIMITS**

- **5 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature +40 °C
  Passage of solids:
  - up to Ø 30 mm for ZXm 2/30
     up to Ø 40 mm for ZXm 2/40
- Minimum immersion depth for continuous service:
   265 mm for ZXm 2/30
  - **275 mm** for ZXm 2/40

# **CONSTRUCTION AND SAFETY STANDARDS**

- The pumps are complete with:
- **5 m** long power cable
- float switch
- hose connection Ø 50 mm

EN 60335-1 IEC 60335-1 CEI 61-150 EN 60034-1 IEC 60034-1 CEI 2-3



# CERTIFICATIONS

Company with management system certified DNV ISO 9001: QUALITY



#### **INSTALLATION AND USE**

**ZX2** series pumps are suitable for draining **dirty water** in domestic and civil applications and for pumping dirty water containing suspended solids up to Ø 40 mm. They distinguish themselves for the ease with which they are installed and their reliability under automatic operating conditions in fixed installations.

## **PATENTS - TRADE MARKS - MODELS**

- Patent n. EP2313658
- Patent n. IT0001428923

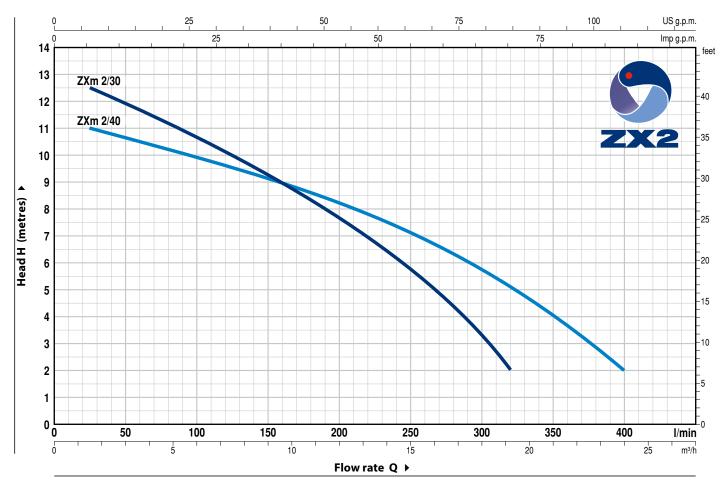
# **OPTIONS AVAILABLE ON REQUEST**

- Pumps with a **10 m** long power cable.
  - N.B.: Standard EN 60335-2-41 states that the power cable must be 10 m long for outdoor applications
- Single-phase pumps without float switch
- Other voltages or 60 Hz frequency



# CHARACTERISTIC CURVES AND PERFORMANCE DATA

#### 50 Hz n= 2900 min<sup>-1</sup>

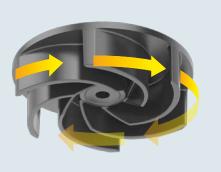


MODEL	POWE	R (P2)	m³/h	0	1.5	3	6	9	12	15	18	19.2	21	24
Single-phase	kW	HP	<b>Q</b> I/min	0	25	50	100	150	200	250	300	320	350	400
ZXm 2/30	0.55	0.75	<b>H</b> metres	13	12.5	11.8	10.6	9.3	7.6	5.8	3.3	2		
ZXm 2/40	0.55	0.75		11.5	11	10.6	9.8	9.2	8.2	7.2	5.7	5.2	4	2

 $\mathbf{Q} = Flow rate \mathbf{H} = Total manometric head$ 

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

# **VORTEX IMPELLER**







# POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Glass fibre reinforced technopolymer complete with threaded delivery port in compliance with ISO 228/1 (5 years guarantee)
2	BASE	Glass fibre reinforced technopolymer
3	IMPELLER	Glass fibre reinforced technopolymer VORTEX type
4	MOTOR CASING	Stainless steel AISI 304
5	MOTOR CASING PLATE	Stainless steel AISI 304
6	MOTOR SHAFT	Stainless steel AISI 431

#### 7 SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER

Seal	Shaft Position		Materials					
Model	Diameter		Stationary ring	<b>Rotational ring</b>	Elastomer			
	Ø 14 mm	Motor side	Silicon carbide	Graphite	NBR			
MGI-14D SIC	<b>9</b> 14 mm	Pump side	Silicon carbide	Silicon carbide	NBR			
MG1-14D SIC	<b>Ø 14</b> mm	Pump side	Silicon carbide	Silicon carbide	NBF	{		

#### 8 BEARINGS 6203 ZZ / 6203 ZZ

#### 9 CAPACITOR

Capacitance

(230 V or 240 V)

**20** μF 450 VL

## 10 ELECTRIC MOTOR

**ZXm 2**: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding

- Insulation: class F
- Protection: IP X8

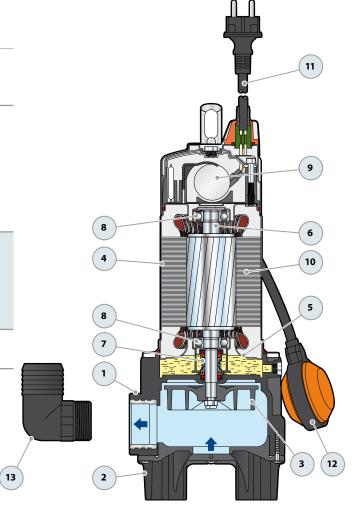
#### 11 POWER CABLE

"H07 RN-F" type (with Schuko plug for single-phase versions only) Standard length 5 metres

# 12 FLOAT SWITCH

#### 13 HOSE CONNECTION

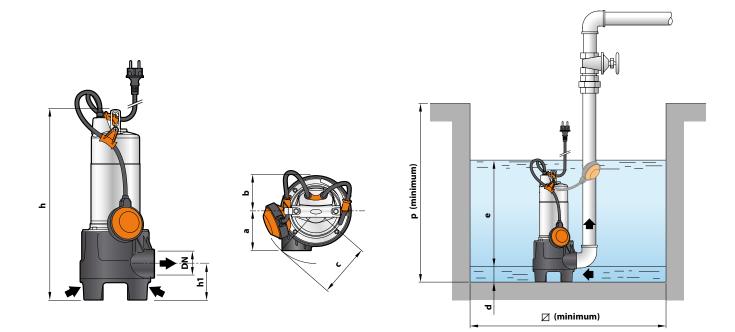
**Ø 50** mm





# **DIMENSIONS AND WEIGHT**

# Typical installation



MODEL	PORT	Passage	DIMENSIONS mm								kg	
Single-phase	DN	of solids	а	b	с	h	h1	d	e	р	Ø	1~
ZXm 2/30	-1/1	Ø 30 mm			413	73					10.8	
ZXm 2/40	11/2"	Ø 40 mm	90	90 81	118	432	83	- 50	variable	500	500	10.8

# **ABSORPTION**

MODEL	VOLTAGE						
Single-phase	230 V	240 V					
ZXm 2/30	<b>4.0</b> A	<b>4.0</b> A					
ZXm 2/40	<b>4.0</b> A	<b>3.8</b> A					

# PALLETIZATION

MODEL	GROUPAGE			
Single-phase	n. pumps			
ZXm 2/30	54			
ZXm 2/40	54			